

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use several sheets if necessary)

| ATTY. DOCKET NO. |
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| 1-2-0203 2115 |

SERIAL NO. 10/084,043

APPLICANT Joseph A. Kwak

FILING DATE February 27, 2002 GROUP 2616

| | 1 | U.S. PATENT | DOCUMENTS | T | r | |
|---------------------|-----------------|-------------|-----------------------|-------|----------|-------------------------------|
| EXAMINER INITIAL | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
| | 4,912,705 | 03/1990 | Paneth et al. | | | |
| | 5,101,406 | 03/1992 | Messenger | | | |
| | 5,280,498 | 01/1994 | Tymes et al. | | | |
| | 5,345,439 | 09/1994 | Marston | | | |
| | 5,345,600 | 09/1994 | Davidson | | | |
| | 5,351,016 | 09/1994 | Dent | | | |
| | 5,544,196 | 08/1996 | Tiedemann, Jr. et al. | | | |
| | 5,570,369 | 10/1996 | Jokinen | | | |
| | 5,648,969 | 07/1997 | Pasternak et al. | | | |
| | 5,657,325 | 08/1997 | Lou et al. | | | |
| | 5,715,260 | 02/1998 | Black et al. | | | |
| | 5,729,557 | 03/1998 | Gardner et al. | | | |
| | 5,828,677 | 10/1998 | Sayeed et al. | | | |
| | 5,838,267 | 11/1998 | Wang et al. | | | |
| | 5,918,156 | 06/1999 | Tanabe | | | |
| | 5,946,320 | 08/1999 | Decker | | | |
| | 5,954,839 | 09/1999 | Park et al.2 | | | |
| | 5,954,839 | 09/1999 | Park et al.17 | | | |
| | 5,956,624 | 09/1999 | Hunsinger et al. | | | |
| | 5,982,760 | 11/1999 | Chen | | | |
| | 5,983,382 | 11/1999 | Pauls | | | |
| | 5,983,383 | 11/1999 | Wolf | | | |
| | 5,983,384 | 11/1999 | Ross | | | |
| | 6,021,123 | 02/2000 | Mimura | | | |
| | 6,021,124 | 02/2000 | Haartsen ³ | 1 | | |

| EXAMINER | DATE CONSIDERED |
|----------|-----------------|
| | |

| FORM PTO-1449 | ATTY. DOCKET NO. SERIAL NO. 1-2-0203.2US 10/084,04 | | |
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| U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | APPLICANT Joseph A. Kwak | | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT | FILING DATE February 27, 2002 | GROUP 2616 | |
| (Use several sheets if necessary) | | | |

| examiner ' | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF |
|------------|-----------------|---------|-----------------------|-------|----------|----------------|
| | 6,049,549 | 04/2000 | Ganz et al. | | | |
| | 6,064,692 | 05/2000 | Chow | | | |
| | 6,128,276 | 10/2000 | Agee | | | |
| | 6,130,918 | 10/2000 | Humphrey et al | | | |
| | 6,134,694 | 10/2000 | Uebayashi et al. | | | |
| | 6,138,260 | 10/2000 | Ketseoglou | | | |
| | 6,145,108 | 11/2000 | Ketseoglou | | | |
| | 6,154,489 | 11/2000 | Kleider et al. | | | |
| | 6,189,123 | 02/2001 | Anders Nystrom et al. | | | |
| | 6,208,663 | 03/2001 | Schramm et al. 4 | | | |
| | 6,212,240 | 04/2001 | Scheibel, Jr. et al. | 1 | | |
| | 6,212,659 | 04/2001 | Zehavi | | | |
| | 6,226,520 | 05/2001 | Jeoung ¹³ | | | |
| | 6,233,711 | 05/2001 | Murayama et al. | | | ····· |
| | 6,262,994 | 07/2001 | Dirschedl et al. | | | |
| | 6,272,183 | 08/2001 | Berens et al. | | | |
| | 6,275,488 | 08/2001 | Cudak et al. | | | |
| | 6,289,003 | 09/2001 | Raitola et al. | | | |
| | 6,301,479 | 10/2001 | Roobel et al. | | | |
| | 6,308,294 | 10/2001 | Ghosh et al. | | | |
| | 6,317,418 | 11/2001 | Raitola et al. | | | |
| | 6,359,877 | 03/2002 | Rathonyi et al. | | | , |
| | 6,366,601 | 04/2002 | Ghosh et al. | | | |
| | 6,370,669 | 04/2002 | Eroz et al. | | | |
| | 6,421,803 | 07/2002 | Persson et al. | | | |
| | 6,449,246 | 09/2002 | Barton et al. | | | |

| EXAMINER | DATE CONSIDERED |
|----------|-----------------|
| | |

| FORM PTO-1449 | ATTY. DOCKET NO. SERIAL NO. 1-2-0203.2US 10/084,043 | | |
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| U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | APPLICANT Joseph A. Kwak | | |
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| (Use several sheets if necessary) | | | |

| EXAMINER INITIAL | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|---------------------|-----------------|--------------|--------------------|-------|----------|-------------------------------|
| | 6,470,391 | 10/2002 | Takamoto et al. | | | |
| | 6,473,399 | 10/2002 | Johansson et al.11 | 1 | | |
| | 6,519,065 | 02/2003 | Colbourne et al. | | | |
| | 6,522,650 | 02/2003 | Yonge et al. | | | - |
| | 6,529,561 | 03/2003 | Sipola | | | |
| | 6,587,985 | 07/2003 | Fukushima et al. | | | |
| | 6,601,207 | 07/2003 | Vanttinen ⁵ | | | |
| | 6,621,807 | 09/2003 | Jung et al. 6 | | | |
| | 6,647,076 | 11/2003 | Schenk et al. | | | |
| | 6,671,266 | 12/2003 | Moon et al. 7 | | | |
| | 6,735,180 | 05/2004 | Malkamaki et al. | | | |
| | 6,760,860 | 07/2004 | Fong et al. | | | |
| | 6,831,910 | 12/2004 | Moon et al.8 | | | 11 |
| | 6,895,010 | 05/2005 | Chang et al. 9 | | | |
| | 6,907,005 | 06/2005 | Dahlman et al. | | | |
| | 6,931,569 | 08/2005 | Fong et al. | | | |
| | 6,956,855 | 10/2005 | Chang 10 | | | |
| | 7,164,654 | 01/2007 | Hunzinger et al. | | | |
| | 2002/0034182 | 02/2002 | Mallory | | | |
| * | 2002/0037000 | 03/2002 | Park et al.20 | | | |
| | 2002/0037058 | 03/2002 | Birru | | | |
| | 2002/0064167 | 05/2002 | Khan et al. | | | ·· |
| | 2002/0191544 | 12/2002 | Cheng et al. | | | |
| | 2003/0039226 | 02/2003 | Kwak | | | |
| | | FOREIGN PATE | NT DOCUMENTS | | | |
| EXAMINER INITIAL | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION |

| EXAMINER | DATÉ CONSIDERED |
|----------|-----------------|
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| FORM PTO-1449 | | ATTY. DOCKET NO. I-2-0203.2US | SERIAL 10/084, | | |
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| U.S. DEPARTMENT OF COMMERCI PATENT AND TRADEMARK OFFICE | | ICANT A. Kwak | | | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT | | FILING DATE February 27, 2002 | | GROUP 2616 | |
| (Use several sheets if necessary) | | | | | |
| | | - | | | · · · |
| 2352696 | 05/2001 | CA | | | |
| 1132772 | 01/2004 | CN | | | |
| 0797327 | 09/1997 | EP | | | |
| 0859475 | 08/1998 | EP | | | |
| 07-336331 | 12/1995 | JP | | X** | |
| 09-298575 | 11/1997 | JP | | X** | |
| 09-247209 | 09/1997 | JP | | X** | |
| 2000-188609 | 07/2000 | JР | | X** | |
| 01-141431 | 06/1989 | JP | | X** | |
| 09-116597 | 05/1997 | JP | | X** | |
| 2001-103034 | 04/2001 | JP | | X** | - |
| 11-046217 | 02/1999 | JP | | X** | |
| 2000-004196 | 01/2000 | JP | | X** | |
| 2003/0004618 | 01/2003 | KR | | | Х |
| 2179370 | 02/2002 | RU | | | |
| 2195768 | 12/2002 | RU | | | |
| 2221338 | 01/2004 | RU | | | |
| 2221339 | 01/2004 | RU | | | |
| 2235432 | 08/2004 | RU | | | |
| 2282310 | 10/2003 | RU | | Х | |
| 2294055 | 01/2006 | RU | | Х | |
| 97118086 | 07/1999 | RU | | | |
| 2001126714 | 07/2003 | RU | | | |
| 431084 | 04/2001 | TW ¹⁹ | | | |
| 00/10298 | 02/2000 | WO | | | |
| 99/12303 | 03/1999 | WO | | | |
| EXAMINER | | DATE CO | NSIDERED | | |

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|--|---|-----------------|--|--------------------|---------------|--|
| U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | | | ATTY. DOCKET NO. I-2-0203.2US | SERIA 10/084 | | |
| | | | APPLICANT Joseph A. Kwak | | | |
| | INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary) | | FILING DATE February 27, 2002 | GRC 26 | | |
| | | 1 | | | | |
| | 99/09698 | 02/1999 | WO | | TRANSLATION | |
| | 97/37459 | 10/1997 | WO 1 | | | |
| | 98/31106 | 07/1998 | WO 14 | | | |
| | 01/01624 | 01/2001 | WO 15 | | | |
| | 02/33877 | 04/2002 | WO 16 | | | |
| | 99/66675 | 12/1999 | WO ¹² | | | |
| | 2004/038990 | 06/2004 | WO18 | | | |
| | | OTHER D | OCUMENTS | | | |
| EXAMINER INITIAL | DESCF | RIPTION (Includ | ing Author, Title, Date, Pertinent | t Pages, Etc.) | | |
| | "Hybrid ARQ Methods for FDD in Release in 2000," TSG-RAN Working Group 1 Meeting #14, Oulu, Finland (July 4-7, 2000). | | | | | |
| 3GPP, "Physical Layer Aspects of UTRA High Speed Downlink Packet Access," 3GPP TR 25.8 (2001-03), pp. 1-89. | | | | | 25.848 V4.0.0 | |
| | 3GPP, 3 rd Generation Partnership Project; Technical Specification Group Radio Access Network; Ph layer aspects of UTRA High Speed Downlink Packet Access (Release 4), TR 25.848 V4.0.0 (2001-03) | | | | | |
| 3GPP, 3 rd Generation Partnership Project; Technical Specification Group Radio Access Network Hybrid ARQ Type II/III (Release 2000), 3GPP TR 25.835 V1.0.0 (September 2000) | | | | | | |
| | Scheme and Code Cor | mbing," Persona | tation of a Mobile Data Link Pro al Communication – Freedom Th echnology Conference, pp. 774 | nrough Wireless To | echnology. | |
| ERIKKSON ET AL. "Comparison of Link Quality Control Strategies for Packet Data Services Vehicular Technology Conference, 1999 IEEE, pp. 938-942, (May 16, 1999). | | | es in EDGE." | | | |

| EXAMINER | DATE CONSIDERED |
|----------|-----------------|
| | · |

KIM ET AL. "On Hybrid ARQ of Reverse Channel in 1xEV-DV", Montreal Canada, C50-20010709-019 SAMSUNG_Reverse Channel HARQ.doc, (July 10, 2001).

| U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | ATTY. DOCKET NO. I-2-0203.2US | SERIAL NO. 10/084,043 |
|---|----------------------------------|--------------------------|
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| (Use several sheets if necessary) | | |

| EXAMINER INITIAL | DESCRIPTION (Including Author, Title, Date, Pertinent Pages, Etc.) |
|---------------------|---|
| | MUNETA ET AL., "A New Frequency-Domain Link Adaptation Scheme for Broadband OFDM Systems," IEEE VTS 50th Vehicular Technology Conference, Vol. 1, pp. 253- 257 (1999). |
| | ROHLING ET AL. "Performance Comparison of Different Multiple Access Schemes for the Downlink of an OFDM Communication System", 1997 IEEE 47th Vehicular Technology Conference, May 1997, vol. 3, p. 1368, (May 1997). |
| | SAYEED, "Throughput Analysis and Design of Fixed and Adaptive ARQ/Diversity Systems for Slow Fading Channels." Global Telecommunications Conference, 1998, pp. 3686-3691 (November 8, 1998). |
| | SHIOZAKI ET AL. "A Hybrid ARQ Scheme With Adaptive Forward Error Correction for Satellite Communications." IEEE Transactions on Communications, pp. 482-484 (April 1, 1991). |
| | STALLINGS, "Networking Standards – A Guide to OSI, ISDN, LAN, and MAN Standards", p. 37, (February 1993). |
| | WANG ET AL. "Error Control and Concealment for Video Communication A Review 1". |

^{**} Abstract Only

| EXAMINER | DATE CONSIDERED | |
|----------|-----------------|--|
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¹ corresponds to JP 2000-507777; ² corresponds to RU 2195768; ³ corresponds to CN 1275279; ⁴ corresponds to CN 1277766;

⁵ corresponds to RU 2001126714; ⁶ corresponds to RU 2195089; ⁷ corresponds to RU 2179370; ⁸ corresponds to RU 2210864;

⁹ corresponds to RU 2221338; ¹⁰ corresponds to RU 2221339; ¹¹ corresponds to RU 2235432; ¹² corresponds to CN 1275299;

¹³ corresponds to RU 2138125; ¹⁴ corresponds to RU 2234806; ¹⁵ corresponds to RU 2216868; ¹⁶ corresponds to RU 2236091;

¹⁷ corresponds to RU 2294055; ¹⁸ corresponds to RU 2282310; ¹⁹ corresponds to US 6,181,683; ²⁰ corresponds to KR 2002-45075.